



REPLACEMENT SHEET 1/4

Coding sequence for the *cbh1* gene (SEQ ID NO: 4). Small case letters represent the signal sequence, large case letters the catalytic domain, bolded italics the linker region, and large case underlined the cellulose-binding domain.

atgtatcggaagttggccgtcatctggcccttggccacagctgtgtCAGTCGGCCTGCACCTCTCCAAATCGGAACTCAC
CCGCCTCTGACATGGCAGAAATGCTCGTCTGGCACGTGCACTCAACAGACAGGCTCCGTG
GTCATCGACGCCA**A**CTGGCGCTGGACTCACGCTACGAACAGCAGCACGA**A**CTGCTACGATGG
CAACACTTGAGCTCGACCCTATGTCCTGACAA**C**AGAGACCTGCGCGAAGAA**A**CTGCTGTCTGGA
CGGTGCCGC**T**ACCGTCCACGTACGGAGTTACCACGAGCGGTAA**C**AGCCTCTCCATTGGCTT
TGTCA**C**CCCAGTCTGCGCAGAAGAACGTTGGCGCTGCCTTACCTTATGGCAGCGACACGAC
CTACCA**G**GAATT**C**ACCC**T**GCTTGGCAACGAGTTCTT**C**GATGTTGATGTT**C**GAGCTGCCG
TGC**G**GCTTGAACGGAGCTCTACTTC**G**TG**T**CCATGGACGCGGATGGTGGCG**T**GAGCAAGTAT
CCCACCAACACCG**C**TGGCG**C**CAAGTACGG**C**ACGGGG**T**ACTGTGACAGCCAGTGTCCCCGCGA
TCTGAAG**T**TCAT**C**AA**T**GG**C**AG**G**CC**A**CG**T**GGAGGG**C**TGGAG**G**CC**T**AT**C**CAAC**A**CGCGA
ACACGGGCATTGGAGGA**C**ACGG**A**AG**C**T**G**T**C**T**G**AG**A**GG**A**T**T**CTGGGAG**G**CC**A**CT**C**
ATCT**C**GGAG**G**CT**T**TA**C**CCCC**C**CC**T**GC**A**CG**A**CT**G**T**C**GG**C**AG**G**AG**A**T**T**CG**G**AGGG**T**GAT
GGGTGCG**C**GG**A**ACT**T**ACT**C**G**A**TA**A**CG**A**AT**T**GG**C**GG**C**ACT**T**GC**G**AT**C**CC**G**AT**G**GT**C**GA
CT**G**GA**A**CC**C**AT**A**CC**G**CT**T**GG**C**A**A**CC**A**CC**A**CG**T**CT**A**CG**T**GG**C**CT**T**GG**C**T**C**A**A**GG**T**TT**A**CC**C**TC**G**A
TACC**A**CCA**A**GA**A**ATT**G**AC**C**CG**T**GT**C**AC**C**CG**T**CT**A**CG**T**GG**C**AG**G**AT**G**GA**A**T**T**CTGGGAG**G**CC**A**CT**C**
TGT**C**AG**A**AT**T**GG**C**GT**C**ACT**T**CC**A**CG**C**AG**C**AT**T**GG**C**GG**C**AG**T**GG**T**AG**T**ACT**T**CT**G**CA**A**CGA
G**C**T**C**AA**C**AG**A**T**G**ATT**A**CT**G**C**A**CG**T**GT**C**AG**G**AG**G**CG**A**AT**T**CG**G**CG**G**AT**C**CT**T**TT**C**T**C**AG**A**CAA
GGG**C**GG**C**CT**G**ACT**C**AG**T**TC**A**AG**A**AG**G**CT**A**CC**T**CT**G**CG**G**AT**T**GG**T**CT**G**TC**A**GT**T**GT**C**TG
GG**A**T**G**ATT**A**CT**A**CG**C**CA**A**CT**G**C**T**GT**G**CT**G**ACT**C**AC**C**CT**A**CC**G**AC**A**AC**A**CG**A**AG**A**CC**T**C**C**T**C**
CAC**A**CC**C**GG**T**GC**C**GT**G**CG**G**AA**A**GG**T**GT**C**CC**A**CC**A**CG**T**CC**G**GT**T**CC**C**T**G**CT**C**AG**G**TC**G**AA**T**C
TC**A**GT**T**CT**C**CA**A**CG**C**CA**A**GG**T**CA**C**CT**T**CT**C**AA**A**CT**C**A**A**GT**T**CG**G**AC**C**CC**A**TT**T**GG**C**AG**G**AC**C**CG
CA**A**CC**C**CT**A**GC**G**CG**G**CA**A**CC**C**CT**T**CC**C**GG**G**AA**A**CC**C**CC**T**GG**C**AC**C**CC**A**CC**C**CC**C**CC**G**CC
AGG**C**CC**A**CT**A**CC**A**CT**G**GA**A**GG**T**CT**T**CC**C**GG**G**AC**T**AC**C**CC**A**GT**T**CT**C**ACT**A**CG**G**CC**A**GT**T**GC**G**CG**G**T**A**
TGG**C**T**A**CG**G**GG**CC**CC**A**CG**G**GT**T**CT**G**C**G**CC**A**CG**G**GC**A**CA**A**CT**T**GC**C**CC**A**GG**T**CT**G**TA**A**CC**C**TT**A**CT**A**C
TCT**C**AG**T**GC**C**CT**T**GT**A**AG**C**T**C**

Figure 1



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REPLACEMENT SHEET 2/4

SDS-PAGE western blot using an anti-CBHI showing the reduction in molecular weight of rCBHI expression clones as a function of the introduction of N>A modifications.

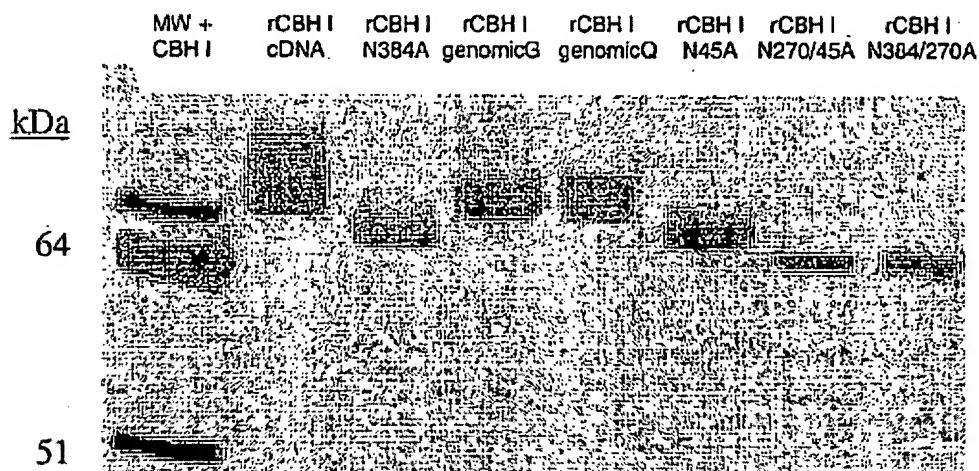


Figure 2



REPLACEMENT SHEET 3/4

Plasmid map of fungal expression vector pPFE2/CBHI

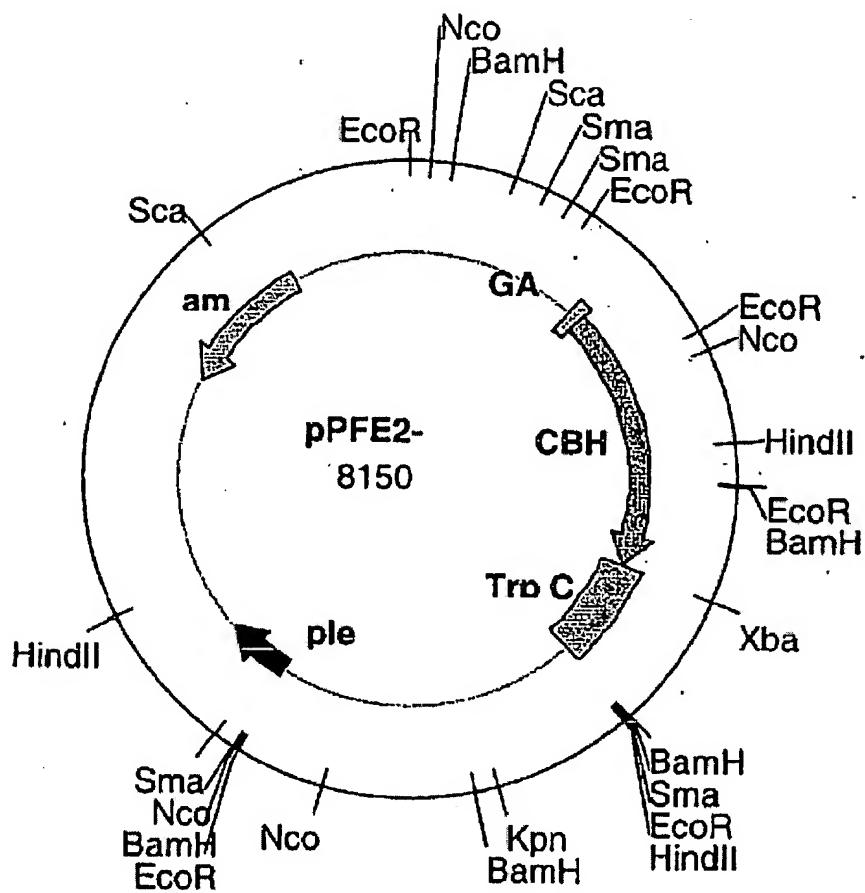


Figure 3



REPLACEMENT SHEET 4/4

Coding sequence, SEQ ID NO: 19, for the linker region of the *cbh1* gene, SEQ ID NO: 4, showing additional proline residues that effect conformation of the linker region in the protein structure.

↓ ↓
P P G G N P P G T T T T R R P
CCTCCCGGCGGAAACCCGCCTGGCACCAACCACCCGCCGCCCA
GGAGGGCCGCCTTGGGCGGACCGTGGTGGTGGCGGGCGGGT
0 20 40

Figure 4